## ABSTRACT

The present invention relates to a process for the stereoselective enzymatic reduction of 1-halo-2-oxo-3-(protected)amino-4-substituted-butanes utilizing certain species of *Rhodococcus* and *Brevibacterium*. The product 1-halo-2-hydroxy-3-(protected)amino-4-substituted-butanes, which are useful as intermediates in the synthesis of compounds that are inhibitors of ACE, renin and HIV proteases, are obtained in high yield and, particularly, in very high diastereomeric purity. The process is advantageously highly selective for the 1S,2S enantiomer of the product.